

**SUPPORTING STATEMENT
SNAPPER-GROUPER FISHERY OF THE SOUTH ATLANTIC REGION
AMENDMENT 15B
OMB CONTROL NO. 0648-xxxx**

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

The information will be collected from commercial and for-hire fishing vessels, with private recreational vessel information to be added at a later time. The potential respondent universe for this request is commercial and for-hire vessels with federal commercial permits that fish in the South Atlantic EEZ. It is estimated that there will be 857 commercial vessels and 1,681 for-hire vessels. Funds are not currently available to implement these programs; however, the current planned information collection requirements are based upon recommendations from the NMFS December 2003 Evaluating Bycatch: A National Approach To Standardized Bycatch Monitoring Programs, the proposed sample size would be 2% randomly selected number of trips made for observer coverage and 2% randomly selected permitted vessels for electronic monitoring (the pending revision to “Observer Programs’ Information That Can Be Gathered Only Through Questions” will cover the burden for the 2% selected vessels and their trips).

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

The Southeast Fishery Science Center has not yet designed and implemented sampling programs for data collections activities for the snapper-grouper fishery in the South Atlantic that involve observers, ELB, and video monitoring. However, an established observer program exists for many other fisheries in the Southeast. The vessel sampling frame is derived from a list of active fishing permits. A similar sampling design could be employed to select vessels for ELB and video monitoring on commercial and for-hire vessels. Programs may stratify the sample by area, gear type, calendar quarter, and/or other variables. These details will be worked out as funds become available to implement the proposed data collection program, with the proposed sample sizes of 2% randomly selected number of vessels and trips made for observer coverage and 2% randomly selected permitted vessels for electronic monitoring.

As these information collections will be mandatory for selected vessels, and applicable vessel permits will not be renewed if there is noncompliance, we are expecting close to an 100% response rate – as is achieved under OMB Control No. 0648-0543, Gulf of Mexico Electronic Logbook.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

A number of methods would be used to maximize the response rate. Most of the information would be collected by an observer or autonomously by electronic equipment. Therefore, response time for collection of data would be small for captain/crew. Information collected directly by an observer on a fishing vessel would be done at a time that is convenient for the captain/crew. Observers are trained to help the captain and crew understand the purpose of the data collection. Captain and crew will also be trained on the use of ELB and video monitoring equipment. Technicians will set up the gear and provide any needed maintenance on equipment. Outreach activities would also help increase the response rate. Renewal of commercial and for-hire permits will be dependent on the fulfillments of the requirements.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

Pilot studies have recently been conducted or are ongoing for ELB and video monitoring. In the future, it may be possible to implement electronic logbooks in the fishery. The Council tested the use of electronic logbook reporting using the Thistle Marine HMS-110 unit to examine the magnitude and spatial distribution of fishing effort and species composition. The project was implemented on two commercial snapper/grouper vessels in South Carolina and North Carolina from May 2002 through November 2002. Over 4,000 high spatial and temporal resolution data points on commercial catch and effort representing 19 fishing trips were captured. The Thistle box allows fishermen to record all species encountered as well as the disposition of released specimens. A comparison of electronic versus paper reporting for a single trip indicates more than twice the number of species than recorded on the trip ticket. The Thistle electronic logbook is also set up to record fish lengths and has the potential to automatically collect information on date, time, location, and fishing times.

A pilot study was recently conducted to test the feasibility of developing a system that would use Video Electronic Monitoring to satisfy the data needs of the reef longline fishery in the Gulf of Mexico. Video systems consisted of three closed circuit television cameras, a GPS receiver, a hydraulic pressure transducer, a winch rotation sensor, and a system control box. Systems were placed on six vessels for a total of over 148 days at sea. Video monitor data and observer fishing event were available for comparison for a total of 218 longline sets. In terms of catch, both video monitoring and observer methods were numerically within 2.7% of each other and detection of protected species categories was identical. Catch identification comparisons between observer and video monitoring methods were generally good with 80% of catch pairing comparisons having a positive match on a hook-by-hook analysis. Overall, results of this study suggest that video monitoring systems shows promise for collecting fishing activity spatial-temporal data and assessing catch composition and further work is needed to determine if the technology could provide reliable catch disposition data.

A pilot study to test video monitoring on hook-and-line (bandit rig) boats in the South Atlantic is ongoing. The project design will allow for statistical comparisons among fishermen's logbooks, at-sea-observers, and electronic video monitoring systems as well as provide information on the age-size structure of frequently discarded species in the complex. Video monitoring systems are being installed on six bandit-rig vessels operating out of North Carolina (NC), South Carolina (SC) and Georgia (GA). Each system consists of 2-5 cameras placed on the back deck of a boat, plus a global positioning system, all connected to a digital video recorder. Pertinent data collected by the system includes species caught, location, depth, date, time, and disposition of released organisms. Each system will be configured to collect data for the entire study period (12 months). In addition to completing detailed discard logbooks, fishermen will retain up to 300 regulatory discards for selected species in order to characterize the age-size structure by the stock. At-sea observers will be placed on a portion of trips monitored with video hardware. Video monitoring data will be interpreted and compared to results from fishermen's discard logbooks as well as data recorded by at-sea observers.

The results of pilot studies will be used to design ELB and video monitoring systems appropriate for the various fisheries in the South Atlantic.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

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